

# PRIDE OF PLACE

The comprehensive litter & recycling solution made possible by a Tennessee bottle bill www.tnbottlebill.org

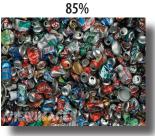
### What Will POP Do for Tennessee's Solid Waste Reduction Efforts?

prepared by Marge Davis, Ph.D. — February 2008





TN's current container recycling rate



TN's projected container recycling rate, with a 5¢ deposit

## 1. POP will increase Tennessee's recycling rate for beverage containers

Every year, Tennesseans buy 4.2 billion beverages in glass, plastic and aluminum containers, then toss 90 percent of the empties into the trash (or onto the roadside). A bottle bill will reverse that. Based on redemption rates in states with similar demographics and similar programs—including a 5-cent deposit, an "expanded" beverage list and a handling fee ample enough (3¢) to support a network of 800+ independent redemption centers—Tennessee can expect a return rate of 85 percent. This means that the packaging for almost 4 billion beverages will be returned to the manufacturing stream, courtesy of the people who produce, sell and buy them.

## 2. POP will encourage higher overall recycling rates

The 11 states with container deposits recycle more municipal solid waste, on average, than states without a deposit—31 percent vs. 20 percent, according to BioCycle's 2006 State of Garbage report. This increase is due at least in part to the fact that bottle bills get people in the habit of recycling; it is also due, in many states, to the increased funding available for recycling and other environmental programs. Tennessee's program is expected to have at least \$30 million available for such programs.



Average overall recycling rate in the 39 non-deposit states



Average overall recycling rate in the 11 deposit states



### 3. POP will prolong landfill life

Beverage containers account for roughly 5 percent of the municipal waste stream, but they take up a disproportionate amount of space in landfills. Glass beverage bottles, for instance, account for half of that volume, while PET bottles take up 9.8 cubic yards per ton compared to 2.75 cubic yards for "average" landfill materials, according to the EPA. Nor do plastic and glass containers readily degrade. Yet here in Tennessee, we landfill a billion plastic bottles each year, three-quarters of a million glass bottles, and nearly 2 million aluminum cans—all of which can and should be recycled.

#### 4. POP will complement voluntary recycling programs, including curbside

Curbside programs thrive in states that have container deposits—an average 351 such programs per bottle-bill state, according to the EPA, compared to 151 in non-deposit states (and just 35 here in Tennessee). This is one reason the U.S. Government Accountability Office, in interviews with solid waste professionals nationwide, found high support for container deposits as a way to boost flagging municipal recycling rates. "If the goal is to capture the maximum amount of materials possible," said Lanier Hickman, former director of the Solid Waste Management Association of North America, "then curbside recycling, [container] deposits and dropoff centers should all be part of a well-thoughtout pollution prevention and waste reduction plan." Though it's true that existing programs will lose much of their aluminum revenues under a deposit, bottle-bill administrators agree that cost savings offset revenue losses. In Cincinnati, for instance, analysts found that overlaying a deposit system onto the city's existing curbside program would decrease recycling costs from 94 dollars per ton to 72 dollars per ton. And keep in mind that under Tennessee's bill, local governments can operate their own redemption centers, which can be expected to gross an average of \$130,000 each per year—more than compensating for any lost scrap sales. In addition, they'll have access to millions of dollars in unspent program funds, which can be used for just about anything related to solid waste and litter reduction.



Curbside programs--TN



Curbside programs deposit states



### 5. POP will drive new products and invigorate the scrap market

Because the redemption process guarantees proper sorting, bottle-bill scrap commands premium prices—as much as \$100 million a year here in Tennessee. And because bottle bills guarantee reliably high volumes, they create a market even for low-value green glass and cumbersome plastics. That's why Strategic Materials, the largest glass recyler in North America, supports Tennessee's bottle bill, and why the Association of Post-Consumer Plastic Recyclers recently broke its long silence on bottle bills, endorsing efforts to expand existing legislation to include bottled water and similar "new-age" beverages—drinks that now account for fully one-quarter of the beverage market.

### 6. POP will save taxpayer dollars in waste hauling and tipping fees

Collectively, Tennessee's beverage containers weigh 230,000 tons. By removing 85 percent of this material from the municipal waste stream, Tennessee's communities will save more than \$6 million annually in tipping fees (based on \$29/ton), while lowering other wastehauling costs such as transportation. (Oregon found that it saved \$656,832 in pick-up, hauling and landfilling costs in the first year after its bottle went into effect.)







4 ounces

Annual per capita litter in Tennessee

Annual per capita litter in Maine

## 7. POP will reduce litter while increasing litter funding

Beverage containers make up a significant portion of Tennessee's litter, and a 5-cent deposit will eliminate most of it. Bottle bills also tend to discourage littering behavior in general. This is why states with bottle bills tend to have dramatically cleaner roads than Tennessee, while spending almost no time or tax dollars picking them up. As for the litter that does remain, POP continues the funding for TDOT's existing county litter grants program, using roughly \$5 million of the unclaimed deposits, while removing the decades-old litter taxes on beer and soda that currently fund the program.

#### 8. POP will stimulate recycling technologies and investment

From reverse vending machines to high-speed electronic processors to the latest "drop-&-go" redemption kiosks, 40 years of bottles bills, both stateside and abroad, have given rise to numerous recycling technologies, redemption services and redemption-related products. These developments typically come out of the private sector but are often a direct benefit to public recycling programs.





#### 9. POP will generate new business for local scrap yards, processors and haulers

Tennessee's bottle bill does away with the old practice of requiring the beverage distributors to pick up their empty containers from the redemption centers. Instead, it gives this task to private recyclers, scrap dealers and trucking companies, who will pay little or nothing for the scrap in return for providing these services. At the same time, these companies can diversify by opening their own redemption centers, or operating "microsites," specially designed rolloffs sited in the parking lots of cooperating grocery stores. (The grocer gets a share of the handling fee.)

### 10. POP will generate funds for a wide range of solid waste-related activities and initiatives

The bill allots 15 percent of the monies remaining in the program (e.g., unclaimed deposits, unspent handling fees, fines and interest) for solid waste programs, including litter and recycling. Tennessee can expect to have at least \$8 million a year available for things like illegal dump cleanups and household hazardous waste collections.

